Amendments to the Specification:

Please amend paragraph [0028] as follows:

[0028] The first sacrificial substrate 4 can be formed using any number of desirable substrate materials. Examples of suitable substrate materials include silicon, ceramic, Iron/Nickel alloys (e.g., ~~"alloy 42," "Kovar," "CuInvarCU"~~ ALLOY 42, KOVAR, CULNVARCU) , etc. To facilitate eventual release of the structures to be formed on the first sacrificial substrate 4, its surface can be coated with a release layer, which may be a material that is readily etched away. Suitable release materials include copper, gold, aluminum and titanium-tungsten, but are not limited by these examples. The surface of the first sacrificial substrate 4 may also be coated with a material that facilitates bonding the wires 2 to its surface. Such materials include, for example, gold, palladium or silver. The coating which serves to facilitate bonding can likewise serve to form a redistribution layer, similar to copper on a printed circuit board (PCB). With a redistribution layer exposed after the sacrificial substrate 4 has been etched away, components can be attached to the coating or solder bumps can be placed in a fixed pattern. This gives the possibility of a second redistribution layer including: 1) where coated wires or probes are attached to the coating to connect to the second layer, and 2) where traces are deposited to connect to a second layer.

Please amend paragraph [0034] as follows:

[0034] Fig. 2 shows a cross sectional view of the substrate 8 with plated through holes 10 formed by the process of Figs. 1A-1D, illustrating examples of how interconnect elements, such as rods or probes, can be attached. As shown in Fig. 2, ends of interconnect elements in the form of electrically conductive rods or probes 12 are inserted in and secured (e.g., by soldering) to the plated through holes 10. Such insertable interconnect elements 12 may be rigidly attached to another device, such as by soldering, to form a connector. The interconnect elements 12 can also be resilient elements such as needle probes, ~~cobra~~ buckling beam (or COBRA) probes, or spring probes used to make components of a probe card assembly for probing electronic devices, such as on semiconductor wafers.

Please amend paragraph [0039] as follows:

[0039] The wires 16 may form buckling beam (or ~~"cobra"~~ COBRA) type probes, with the substrate being a probe head, space transformer, or tile for a probe card. For buckling beam probes, the wires 16 are made of a resilient material so that they bend when contact is made with another electrical element, and then straighten out, or return to their original shape when disconnected. Because the plated through holes 10 provide added current carrying capacity, the wires 16 may be thinner than prior buckling beam probes. For example, such wires may have diameters less than 0.003 inches and in some embodiments 0.002 inches, 0.001 inches, or even smaller, while prior buckling beam probes required diameters of at least 0.003 inches.

Please amend paragraph [0046] as follows:

[0046] Figs. 6-7 illustrate exemplary uses of the substrate with attachment wells formed using the method described with respect to Figs. 5A-5E. In Fig. 6, rods or probes 55 are inserted and attached, e.g., by soldering to the attachment wells 46. Fig. 7 shows above surface wire type spring probes 57 and 59, which can be inserted in the attachment wells. The spring probe 57 has a slot 60 forming a compressible contacting surface when inserted within the well to securely hold the probe 57 within the well. Even with the compression slot 60, soldering can be used to assure the probe 57 remains engaged within the well. Probe 59 shows modification to the probe 57 to add laterally protruding bumps 61 as an alternative to assure the probe remains engaged within the well. Other alternative wire-type probes may be formed by bonding wires inside the wells. For example, the wire shown in Figs. 7A-7C of U.S. Pat. No. ~~5,467,211~~ 5,476,211 can be bonded inside the well. Optionally, the wire can be coated as shown in Fig. 8 of U.S. Pat. No. ~~5,467,211~~ 5,476,211, incorporated herein by reference. When any of the wire-type probes are inserted, the well can be filled with solder to increase the strength of its attachment if desired.

Please amend paragraph [0053] as follows:

[0053] The ability to rework a tile layer which supports spring probes (reworking meaning to remove the tile and replace it with another tile) is very difficult to accomplish if soldering or epoxy connects the tile layer and an interconnecting space transformer layer to make permanent contacts between the layers. Probes are typically formed and attached by solder or epoxy to ceramic substrates to form tiles. The tiles are then attached to another ~~multiplayer~~ multilayer ceramic substrate space transformer using a thin film copper polyamide epoxy layer.

Please amend paragraph [0060] as follows:

[0060] The probe 88 shown is a resilient spring probe, although in another embodiment a non-resilient probe could be used. The probe 88 shown in cross section includes [[an]] a center gold wire 90 surrounded by a layer of nickel or palladium cobalt 91, which is then surrounded by another gold layer 92. The insert cap 86 is shown to be plated with a gold layer 93 along with gold plating 94 provided on the substrate 84 forming the plated through hole 85 to facilitate a good electrical bond between the cap 86, plated through hole 85, and probe 88.

Please amend paragraph [0063] as follows:

[0063] Fig. 12 further shows the space transformer layer 105 including a power [[pin]] supply pin 108 for carrying power to a power plane on the tile 100. The power supply pin 108 further serves to align the tile 100 and space transformer layer 105. The tile layer 100 is further shown to include capacitive decoupling layers 110. A spring clip 112 is further shown for maintaining contact between the tile 100 and space transformer layer 105 once the layers are plugged together.

Please amend paragraph [0064] as follows:

[0064] Figs. 13A-13C show cross-sectional views illustrating manufacture of a second embodiment of a tile with a pluggable contact. The tile 108 formed by the process shown in Figs. 13A-13C includes a vertical feedthrough with a first portion of the feedthrough including a permanent electrical contact 110, and another ~~the other~~ end having a pluggable or detachable electrical contact element 112 as shown in Fig. 13C.